ABSTRACT

In mobile IP wireless data networking, methods are described for correctly routing packets through a foreign agent to or from wireless nodes where the wireless nodes have the same home network IP address. Instead of using normal IP routing, the foreign agent uniquely identifies the wireless node's home network IP address and home agent IP address with a PPP

5   link address associated with a PPP link between the foreign agent and the wireless node. This association between PPP link addresses, home agent IP addresses, and home network IP addresses, is preferably implemented in software as a table stored in the foreign agent. The routing of packets through the foreign agent to the mobile nodes is performed by reference to the table. The table allows the foreign agent to correctly and efficiently route packets in the

10   situation where multiple wireless nodes are registered with the foreign agent, but more than one of the wireless nodes have the same home network IP address.

15